

Title (en)  
METHOD AND APPARATUS FOR DETECTING OVERLAPPED SUBSTRATES

Title (de)  
VERFAHREN UND VORRICHTUNG ZUM NACHWEIS ÜBERLAPPENDER SUBSTRATE

Title (fr)  
PROCEDE ET DISPOSITIF POUR DETECTER DES SUBSTRATS SUPERPOSES

Publication  
**EP 1904833 A4 20110803 (EN)**

Application  
**EP 06752827 A 20060628**

Priority  
• CA 2006001054 W 20060628  
• CA 2510943 A 20050628

Abstract (en)  
[origin: CA2510943A1] An apparatus and method for detection of overlapped substrates, that are at least opaque, analyses a high frequency component caused by speckle for a sudden drop therein. This high frequency component drops dramatically when overlapped substrates are present and therefore allows fast accurate recognition of an overlapped substrate condition. This is useful in many applications including banknote validators.

IPC 8 full level  
**G01N 21/892** (2006.01); **B65H 7/12** (2006.01); **G01B 11/30** (2006.01); **G07D 7/12** (2016.01)

CPC (source: EP US)  
**G07D 7/12** (2013.01 - EP US); **G07D 7/183** (2017.04 - EP US)

Citation (search report)  
• [A] EP 1160737 A1 20011205 - OBSHESTVO S OGRANICHENNOI OTVE [RU]  
• [A] US 2001035603 A1 20011101 - GRAVES BRADFORD T [US], et al  
• See references of WO 2007000045A1

Cited by  
CN105321253A

Designated contracting state (EPC)  
DE ES GB

DOCDB simple family (publication)  
**CA 2510943 A1 20061228**; AU 2006264172 A1 20070104; CN 101263382 A 20080910; EP 1904833 A1 20080402; EP 1904833 A4 20110803; JP 2008544288 A 20081204; US 2012092672 A1 20120419; WO 2007000045 A1 20070104

DOCDB simple family (application)  
**CA 2510943 A 20050628**; AU 2006264172 A 20060628; CA 2006001054 W 20060628; CN 200680030979 A 20060628; EP 06752827 A 20060628; JP 2008518579 A 20060628; US 92288506 A 20060628